

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An electrically conductive paste comprising:
a particulate silver compound,
a reducing agent, and
a dispersant; wherein
~~which the dispersant~~ is selected from the group consisting of hydroxypropyl cellulose,
polyvinyl pyrrolidone; and polyvinyl alcohol; ~~wherein;~~
the particulate silver compound comprises at least one of silver oxide, silver carbonate or
silver acetate; ~~and;~~
the average particle diameter of the particulate silver compound is ~~more than 0.08 μm~~
~~and less than 0.1 μm~~ about 0.01-10 μm; wherein
the volume resistivity of an electrically conductive coating, which is obtained by coating
~~comprising the electrically conductive paste followed by heating,~~ is about 3.0×10^{-6} to about
 $8.0 \times 10^{-6} \Omega \cdot \text{cm}$; ~~;~~
~~which the electrically conductive coating~~ satisfies the following formula (1) when W
represents the volume resistivity ($\Omega \cdot \text{cm}$) of the electrically conductive coating and X represents
its specific gravity:
$$W < -1.72 \times 10^{-6} \times X + 2.3 \times 10^{-5} \quad (1); \text{ and}$$

the silver particles in the electrically conductive coating are mutually fused.

2-3. (cancelled).

4. (previously presented): An electrically conductive paste according to claim 1, wherein the reducing agent comprises at least one of ethylene glycol, diethylene glycol, triethylene glycol or ethylene glycol diacetate.

5. (currently amended): An electrically conductive coating formation method comprising in sequence, the ~~step steps of~~ coating the electrically conductive paste according to claim 1, and ~~followed by the step of~~ heating the electrically conductive ~~composition~~ paste.

6. (currently amended): An electrically conductive coating which includes the electrically conductive paste according to claim 1, wherein the silver particles of the electrically conductive coating are mutually fused.

7-8. (cancelled).

9. (currently amended): An electrically conductive coating comprising the electrically conductive paste according to claim 1, ~~which satisfies~~ wherein the electrically conductive coating satisfies the following formula (2) when Y represents the number of pores of about 100 nm or larger present in a surface area of

about 10 μm x 10 μm on the uppermost surface of the electrically conductive coating, and Z represents the heating temperature ($^{\circ}\text{C}$):

$$Y < -46.08 \times Z + 10112 \quad (2).$$

10. (cancelled).

11. (currently amended): A method of producing the electrically conductive paste according to claim 1, comprising:

producing wherein the particulate silver compound ~~is produced~~ by a liquid phase method in which silver oxide is obtained by reacting an aqueous alkaline solution with the product of the reaction between a silver compound and an aqueous silver nitrate solution.

12. (currently amended): A method of producing the electrically conductive paste according to claim 11, further comprising:

~~wherein the particulate silver compound is produced by a liquid phase method and adding~~ a dispersion stabilizer ~~is added~~ to the aqueous alkaline solution.

13. (currently amended): A method of producing the electrically conductive paste according to claim 1, comprising:

~~wherein using~~ a vapor phase method ~~is used~~ to obtain ~~a the~~ particulate silver compound by synthesizing silver oxide by heating a silver halide and oxygen in the vapor phase followed by thermal oxidation.

14. (previously presented): An electrically conductive paste according to claim 1, wherein the amount of reducing agent used is about 20 moles or less with respect to about 1 mole of particulate silver compound.

15. (previously presented): An electrically conductive paste according to claim 14, wherein the amount of reducing agent used is about 0.5-10 moles with respect to about 1 mole of particulate silver compound.

16. (previously presented): An electrically conductive paste according to claim 1, wherein a dispersion medium is used to disperse or dissolve the particulate silver compound and reducing agent and obtain a liquid electrically conductive composition.

17. (previously presented): An electrically conductive paste according to claim 16, wherein an organic solvent or an alcohol is used as the dispersion medium.

18. (previously presented): An electrically conductive paste according to claim 1, wherein when the reducing agent is a liquid and the particulate silver compound is dispersed, the reducing agent also serves as a dispersion medium.

19. (cancelled).

20. (previously presented): An electrically conductive paste according to claim 1, wherein the amount of the dispersant used is about 0-300 parts by weight to about 100 parts by weight of particulate silver compound.

21. (previously presented): An electrically conductive paste according to claim 1, wherein the viscosity of the electrically conductive composition is about 30-300 poise.

22. (previously presented): A method of producing the electrically conductive coating obtained by coating the electrically conductive paste according to claim 1 followed by heating, wherein the particulate silver compound is reduced, and the reduced metallic silver particles form a continuous, metallic silver thin coating.

23. (previously presented): A method of producing the electrically conductive coating which is obtained by coating an electrically conductive paste according to claim 1 followed by heating, formed on a plastic base material, wherein silver particles are mutually fused, and the volume resistivity is about 3.0×10^{-6} to about $8.0 \times 10^{-6} \Omega \cdot \text{cm}$.

24. (previously presented): An electrically conductive paste according to claim 1, wherein the electrically conductive paste is used for printing on a base material.

AMENDMENT UNDER 37 C.F.R. § 1.111

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25. (new): An electrically conductive paste according to claim 1,
wherein the average particle diameter of the particular silver compound is about 0.5 μm
or less.